MBTA Key Bus Route Improvement Program

The MBTA is committed to improving your bus riding experience. Over the next two years, the MBTA will plan and implement a series of enhancements to 15 bus routes, chosen for their high ridership and frequency of service. This project, known as the **Key Bus Route Improvement Program**, will help reduce trip times; improve accessibility; enhance customer comfort, convenience and safety; and make the routes more reliable and cost-effective.

Utilizing $10 million in grant funding through the American Recovery and Reinvestment Act (ARRA) the MBTA now has the opportunity to implement the Key Bus Route Improvement Program. This one-time opportunity to improve service quality will be accomplished by implementing a combination of the following: bus stop location improvements, bus stop amenities – shelters, benches, trash receptacles and signage, curb extensions, and accessibility enhancements, in addition to traffic signal upgrades.

Working with local municipalities, all Key Bus Route improvements will be developed with the help of public input. The public process for Routes 23 and 39 has been completed, while an ongoing process for the Route 28 is being coordinated with MassDOT's Roxbury Dorchester Mattapan Transit Needs Study. The remaining 12 routes will be improved over the next two years through a phased implementation approach, with a series of community workshops that began January 2011. Planning for Routes 1,57 and 66 has been completed and Routes 111, 116 and 117 constitute the next phase of Key Bus Routes scheduled for implementation. Initial community meetings were held in April 2011 to present preliminary recommendations. Based on municipal and community feedback some of these recommendations were refined and presented for further comment in May 2011. All feedback was incorporated into proposed recommendations, which are being presented tonight. Your input at this meeting will help inform how we improve Bus Routes 111, 116 and 117. We look forward to collaborating with you to provide a better bus service!

For more information and project updates please visit www.mbta.com/keybusroutes.

MBTA Key Bus Route 3rd Meetings

Route	Date	Time	Location	Address
111, 116/117	Wednesday, December 7th	6:00 – 7:30	Chelsea Public Library	569 Broadway, Chelsea
116/117	Thursday, December 15th	6:30 – 8:00	Revere City Hall Council Chambers	281 Broadway, Revere

Moving Massachusetts Forward. massDOT

MBTA Key Bus Route Improvement Program

Glossary and Abbreviations of Terms

Bus Stop Location – Nearside: bus stop is located before an intersection, or driveway.
Bus Stop Location – Farside: bus stop is located after an intersection, or driveway.
Bus Stop Location – Mid-block: bus stop is located in the middle of a street block.

Companion Stop – bus stops are typically located in pairs, one on each side of the street.

Curb extension (or bulb out) – sidewalk is widened in a particular section, sometimes either side of a crosswalk, or at the start/end of on-street parking.

Generic/Rear Sign – MBTA bus stop sign that is located at the rear of the stop to define the end of the bus stop.

Landing pad/area – an area at the front of the bus stop where customers board and alight the bus.

Queue jump – priority is given to buses at an intersection. It can also come in a variety of forms such as a shared right turn/bus lane allowing the bus to access a farside stop more quickly or with a bus only signal, allowing buses to advance ahead of the general traffic.

Rt. Descr. Sign (Route Descriptive Sign) – MBTA bus stop sign that is located at the front of the stop and lists bus route and customer information.

Sharrow – pavement marking on the roadway that indicates to bicyclists that the road space they are entering is shared, i.e. with a bus stop or general traffic.

TSP (Transit Signal Priority) – priority is given to buses at traffic signals. This can come in a variety of forms, but the most common form is for the green time to be extended for all traffic when a bus is approaching the intersection. This will only be effective for farside or mid-block stops.

INBOUND

Bus Stop Sequence	Stop ID	Stop Description	Dist. to Next Stop (ft)	Time to Next Stop (min)	Location	Routes Serving Stop	~~Rt 111 Ons (Win03)~~	~~Rt 111 Offs (Win03)~~	Rt 111 Ons (Fall11)	Rt 111 Offs (Fall11)	Ons (Total All Routes)	Offs (Total All Routes)	Municipality	Sidewalk Width (ft)	Existing Shelter	Existing Bench	Existing Bus Stop Length (ft)	Proposed Recommendations
1	15787	Elm St @ Washington Ave, Op Loop	1130	5	Mid Block	110, 111	~~101~~	~~4~~	298	4	324	16	Everett	7	No	No	80	Install rear sign farside of crosswalk and relocate front sign closer to driveway. Add bench, trash receptacle and pavement markings.
2	5587	Woodlawn Ave @ Staffiery Rd	520	2	Mid Block	111	~~17~~	~~0~~	24	2	24	2	Chelsea	7	No	No	57	Relocate to farside of Staffiery to provide sufficient bus stop length and to minimize parking impact = -2 parking spaces, 3 spaces could be reinstated at existing stop. Locate signs between driveways. Install pavement markings.
3	5588	Woodlawn Ave @ Washington Ave	450	2	Near Side	111	~~23~~	~~1~~	39	4	39	4	Chelsea	8	No	No	34	Revised Recomm: Proposal to consolidate with Prospect at new stop opp. Hy Sil is withdrawn. Remove Woodlawn Ave stop to improve bus stop spacing and due to driveway within stop.
4	5589	Washington Ave @ Prospect Ave	680	3	Far Side	111	~~55~~	~~3~~	128	1	128	1	Chelsea	10	No	Yes	34	Revised Recomm: Proposal to consolidate with Washington Ave is withdrawn. Retain stop in current location and lengthen stop to 60-65' by relocating rear sign onto post closer to crosswalk (no parking impact), bus will use driveway for egress only. Relocate bench eastwards if obstructing landing area.
5	5590	Washington Ave @ Annese Rd	880	4	Near Side	111	~~77~~	~~2~~	106	2	106	2	Chelsea	8	No	Yes	48	Relocate rear sign 90-100' from front sign to provide sufficient stop length = -2 parking spaces. Add pavement markings.
6	5591	Garfield Ave @ Exeter St	410	2	Mid Block	111	~~188~~	~~1~~	174	2	174	2	Chelsea	9	No	No	55	Relocate front sign to provide 100-110' curb space (can utilize 2 driveways and hydrant as part of the bus stop zone but locate front sign nearside of 2nd driveway) = - 2 parking spaces (2 spaces would remain behind the stop). Investigate adding a narrow shelter with abutter permission (bench alternatively). Add pavement markings.
7	5592	Garfield Ave @ Op Clyde St	530	3	Mid Block	111	~~48~~	~~0~~	47	1	47	1	Chelsea	8	No	No	40	Remove stop to improve stop spacing and due to relatively low boardings. Reinstate 2 parking spaces. Revised stop spacing would be 900'.
8	5593	Sagamore Ave @ Jones Ave	730	3	Near Side	111	~~143~~	~~3~~	157	9	157	9	Chelsea	6	No	Yes	58	Relocate rear sign to farside of driveway to provide 90-100' curb space = -1 parking space. Add pavement markings.
9	5594	Sagamore Ave @ Murray St	630	3	Near Side	111	~~84~~	~~2~~	150	3	150	3	Chelsea	8	No	Yes	68	Retain stop but relocate front sign before crosswalk and locate rear sign 90-100' from front sign = -1-2 parking spaces. Add pavement markings.
10	5595	Sagamore Ave @ Washington Ave	320	2	Near Side	111	~~274~~	~~15~~	306	30	306	30	Chelsea	7	No	Yes	41	Retain stop but relocate rear sign 90-100' from front sign = -1-2 parking spaces. Add pavement markings. Investigate signal improvements at Revere Beach Parkway.
11	5596	Washington Ave @ Revere Beach Pkwy	340	2	Mid Block	111	~~46~~	~~5~~	244	11	244	11	Chelsea	9	CEMUSA	No	44	Remove stop to improve stop spacing and traffic flow. Shelter will need to be relocated. Maintain clearway.
12	5597	Washington Ave @ Reynolds Ave	460	2	Far Side	111, 112	~~83~~	~~34~~	190	28	190	28	Chelsea	9	No	Yes	39	Retain stop but relocate rear sign 60-65' from front sign (no parking impact). Add pavement markings. Sidewalk will be improved as reconstructed as part of Washington Ave Reconstruction Project. Revised Recomm: Investigate adding a narrow shelter (if a shelter is added bench would need to be relocated or potentially removed due to sidewalk constraints).

INBOUND

Bus Stop Sequence	Stop ID	Stop Description	Dist. to Next Stop (ft)	Time to Next Stop (min)	Location	Routes Serving Stop	~~Rt 111 Ons (Win03)~~	~~Rt 111 Offs (Win03)~~	Rt 111 Ons (Fall11)	Rt 111 Offs (Fall11)	Ons (Total All Routes)	Offs (Total All Routes)	Municipality	Sidewalk Width (ft)	Existing Shelter	Existing Bench	Existing Bus Stop Length (ft)	Proposed Recommendations
13	5598	Washington Ave @ Op Jefferson Ave	830	4	Mid Block	111	~~84~~	~~4~~	129	6	129	6	Chelsea	9	No	Yes	60	Revised Recomm: Proposal to consolidate with Carmel with a new stop midblock between Jefferson and Carmel is withdrawn. Retain stop. Lengthen stop and relocate landing area from driveway to farside of driveway. Although stop is proposed for lengthening as part of Washington Ave Reconstruction Project, landing area remains non-complaint within driveway. Curb extension proposed as part of that project will need to be shortened, and the proposed tree pit removed to maintain a clear zone for both doors. Add bench and pavement markings.
14	5599	Washington Ave @ Carmel St	470	2	Far Side	111	~~178~~	~~6~~	147	7	147	7	Chelsea	11	No	Yes	50	Revised Recomm: Proposal to consolidate with Carmel with a new stop midblock between Jefferson and Carmel is withdrawn. Retain Carmel stop in existing location. Investigate adding a shelter with abutter permission (if install shelter, will need to relocate bench west of shelter). Add pavement markings.
15	5600	Washington Ave @ Spruce St	670	3	Near Side	111	~~154~~	~~11~~	194	16	194	16	Chelsea	11	No	Yes	44	Relocate stop farside of Spruce = -3 parking spaces (hydrant at rear beyond crosswalk) in coordination with Washington Ave Reconstruction Project. Reinstate 2 spaces at existing stop. Install rear sign farside of crosswalk and install front sign 60-65' forward. Existing bench and trash receptacle will need to be relocated. Relocate 2 bike racks proposed at existing stop, and remove or relocate tree pit at farside location 20-30' east, proposed in Washington St Reconstruction Project. Investigate adding a shelter with abutter permission (bench alternatively) and add trash receptacle and pavement markings.
16	5601	Washington Ave @ Cary Ave	250	1	Near Side	111	~~266~~	~~22~~	398	40	398	40	Chelsea	12	No	No	51	Consolidate with Bloomingdale at a new stop nearside of Bloomingdale, in coordination with Washington Ave Reconstruction Project, to provide a safer and more visible bus stop (existing Cary Ave stop on a bend & spans crosswalk) and enable the provision of amenities = -4-5 parking spaces. 2-3 parking spaces could reinstated at existing stops (1 farside of crosswalk at Cary Ave, and 1-2 beyond hydrant at Bloomingdale). Install shelter with abutter permission (bench alternatively) and add trash receptacle and pavement markings. Provide 90-100' of curb space and provide clear boarding areas among trees, lampposts etc. Tree, grate and bollard proposed as part of Washington St Project is recommended for removal to maintain clear boarding area.
17	5602	Washington Ave @ Bloomingdale St	790	4	Far Side	111	~~89~~	~~9~~	161	12	161	12	Chelsea	9	No	Yes	46	Consolidate with Cary Ave as above. 1-2 spaces could be reinstated beyond hydrant. Relocate bike rack proposed as part of Washington Ave Reconstruction Project.
18	5603	Washington Ave @ Heard St	510	2	Near Side	111	~~113~~	~~68~~	226	39	226	39	Chelsea	10	No	Yes	71	Retain stop and extend towards crosswalk by relocating rear sign from utility pole to sign post 90-100' from front sign, providing sufficient length = -1 parking space. Add pavement markings.
19	5604	Washington Ave @ Chestnut St	540	3	Far Side	111, 112, 114	~~136~~	~~66~~	245	73	375	185	Chelsea	9	CEMUSA	No	53	Retain stop despite proximity of stops, due to high ridership. Add pavement markings. Rename Washington Ave @ Sixth St.

INBOUND

Bus Stop Sequence	Stop ID	Stop Description	Dist. to Next Stop (ft)	Time to Next Stop (min)	Location	Routes Serving Stop	~~Rt 111 Ons (Win03)~~	~~Rt 111 Offs (Win03)~~	Rt 111 Ons (Fall11)	Rt 111 Offs (Fall11)	Ons (Total All Routes)	Offs (Total All Routes)	Municipality	Sidewalk Width (ft)	Existing Shelter	Existing Bench	Existing Bus Stop Length (ft)	Proposed Recommendations
20	5605	Washington Ave @ Fifth St	630	3	Near Side	111, 112, 114, 116, 117	~~798~~	~~237~~	1182	361	1723	739	Chelsea	9	No	No	75	Coordinate with Rts 116/117. Revised Recomm: Retain stop in existing location (due to travel lane contraints farside), and add pavement markings. Lengthen stop to 100+' by relocating front sign and post closer to lampost/in front of trash receptacle and relocate rear sign onto post (no parking impact). Investigate adding a bench outside of dental office. Investigate alternative shelter options with the City eg awning. Investigate extending existing stop to 140' to enable 2 buses to pull to the curb (2 buses can be accommodated without blocking the crosswalk). Would require taking 1-2 parking spaces behind the crosswalk.
21	5606	Broadway @ Fourth St	960	5	Near Side	111, 112, 114, 116, 117	~~346~~	~~119~~	555	154	767	281	Chelsea	11	CEMUSA	No	48	Coordinate with Rts 116/117. Relocate front sign 5ft east of crosswalk, and relocate rear sign to provide 90-100' of curb space = -2-3 metered parking spaces. Add pavement markings.
22	5608	Third St @ Everett Av	1400	7	Far Side	111, 114	~~535~~	~~96~~	648	96	648	104	Chelsea	10	CEMUSA - 2	1	40	Maintain stop at current location (due to presence of 2 shelters). Relocate front sign onto post and add a rear sign on post to provide 90' curb space. Add pavement markings.
23	5650	Arlington St @ Fifth St	2490	12	Near Side	111, 112, 114	~~165~~	~~6~~	278	29	282	37	Chelsea	10	CEMUSA-2	1	98	Relocate front sign closer to curb extension and add rear sign to provide 100-110' of curb space = no parking impact. Add pavement markings.
~~24~~	2830	N Washington St @ Medford	1310	6	Near Side	92, 93, 111 426, 428	~~49~~	~~236~~	20	381	29	462	Boston	12	No	No	60	Relocate stop farside of Causeway due to insufficient length at existing stop and to minimize parking impact = -2 parking spaces (hydrant at back of stop) and 2 spaces can be reinstated at existing stop. Add bench, trash receptacle and pavement markings. Investigate traffic signal improvements at Causeway St.
25	8310	Haymarket Station	-	-	Station	Multiple	~~0~~	~~3230~~	0	4925	-	-	Boston	-	-	-	-	None.
							~~4052~~	~~4180~~	6048 49%	6238 49%								

For explanation of terms, please see Glossary and Abbreviations handout.

OUTBOUND

Bus Stop Sequence	Stop ID	Stop Description	Dist. to Next Stop (ft)	Time to Next Stop (min)	Location	Routes Serving Stop	~~Rt 111 Ons (Win03)~~	~~Rt 111 Offs (Win03)~~	Rt 111 Ons (Fall11)	Rt 111 Offs (Fall11)	Ons (Total All Routes)	Offs (Total All Routes)	Municipality	Sidewalk Width (ft)	Existing Shelter	Existing Bench	Existing Bus Stop Length (ft)	Proposed Recommendations
1	8310	Haymarket Station	1400	7	Station	Multiple	~~3526~~	~~0~~	4021	0	-	-	Boston	-	-	-	-	None.
2	2832	N Washington St @ Thacher St	750	4	Near Side	92, 93, 111	~~10~~	~~0~~	79	23	109	34	Boston	13	No	Yes	80	Remove stop due to proximity to Haymarket, high parking demand/illegal commercial parking in stop (UPS mailbox at front of stop). Revised stop spacing woud be 2150' (walk distance to Haymarket is ~1000'). 4 spaces (2 before stop line) could be reinstated in the existing stop.
3	2833	N Washington St @ Commercial St	2940	14	Far Side	92, 93, 111	~~24~~	~~2~~	49	17	85	34	Boston	8	No	No	51	Add rear sign on sign post 60-65' from front sign (no parking impact).
4	5611	Beacon St @ Broadway	450	2	Far Side	111	~~14~~	~~214~~	30	198	30	198	Chelsea	6	No	No	100	Add rear sign on sign post 60-65' from front sign (no parking impact) and add pavement markings. Rename stop "Beacon @ Chestnut" (fs of Chestnut).
5	5612	Park St,#9 @ Williams St	810	4	Far Side	111	~~39~~	~~166~~	53	164	53	164	Chelsea	10	No	No	65	Retain stop due to high offs, despite proximity to previous stop. Add pavement markings to deter illegal parking.
6	5613	Park St,#92 @ Cross St	630	3	Mid Block	111	~~27~~	~~327~~	53	348	53	348	Chelsea	11	No	No	49	Relocate front sign to nearside of Cross. Add rear sign 90-100' from front sign (no parking impact). Add trash receptacle and pavement markings.
7	5614	Park St @ Hawthorn St	910	4	Near Side	111, 112, 114, 116, 117	~~50~~	~~381~~	59	412	126	551	Chelsea	8	No	No	52	Coordinate with Rts 116/117. Relocate to farside of wide driveway at Hawthorn @ Central = -3 metered spaces to provide accessible path to stop and improve bus stop spacing. 2-3 parking spaces could be reinstated at existing stop. Add trash receptacle and pavement markings. Investigate adding a narrow shelter with abutter permission. Add bench alternatively.
8	5615	Hawthorne St @ Bellingham Sq	400	2	Near Side	111, 112, 114, 116, 117	~~445~~	~~971~~	519	1060	1029	1551	Chelsea	10	2 shelters-steel with glass canopy	Yes - 5	100	Coordinate with Rts 116/117. Add pavement markings. Rename Hawthorne St @ Bellingham St (Bellingham Sq) Investigate the potential for signal improvements at Bellingham Sq.
9	5617	Broadway @ Shurtleff	300	1	Near Side	111	~~33~~	~~121~~	2	16	2	16	Chelsea	6	No	Yes - 2, plus concrete seating	79	Coordinate with Rts 116/117. Remove stop to improve bus stop spacing, due to low ridership and bus stop blocking crosswalk and 6' sidewalk does not allow for a compliant 8' landing area. Revised spacing would be 1090'. 3-4 parking spaces could be resinstated if desired by the City.
10	56170	City Hall Ave @ Riley Way	790	4	Near Side	111	~~33~~	~~121~~	68	141	68	141	Chelsea	9	Yes	No	70	Add trash receptacle and pavement markings.
11	5618	Washington Ave @ Crescent Av	450	2	Near Side	111	~~55~~	~~163~~	48	134	48	134	Chelsea	7	No	Yes	46	Retain stop and relocate rear sign 90-100' from front sign. No parking impact. Add pavement markings. Sidewalk will be improved as part of the Washington St Reconstruction Project.
12	5619	Washington Ave @ Opp. Orange St	510	2	Mid Block	111	~~9~~	~~98~~	13	77	13	77	Chelsea	7	No	No	44	Remove stop due to improve stop spacing. Revised stop spacing would be ~1000'. No parking benefit due to clearway.
13	5620	Washington Ave @ Cary Av	580	3	Near Side	111	~~51~~	~~314~~	43	251	43	251	Chelsea	9	No	No	57	Relocate stop back from Cary Ave, opp. Bloomingdale, at abandoned site and provide 100-110' of curb space = no parking impact due to clearway. Sidewalk will be reconstructed as part of the Washington Ave Reconstruction Project. Add bench, trash receptacle and pavement markings. Maintain clearway at existing stop to improve traffic flow.
14	5621	Washington Ave @ Spruce St	650	3	Near Side	111	~~5~~	~~127~~	21	101	21	101	Chelsea	9	No	No	54	Retain stop and relocate rear sign 90-100' from front sign, in coordination with Washington Ave Reconstruction Project. No parking impact. Install pavement markings.

For explanation of terms, please see Glossary and Abbreviations handout.

OUTBOUND

Bus Stop Sequence	Stop ID	Stop Description	Dist. to Next Stop (ft)	Time to Next Stop (min)	Location	Routes Serving Stop	~~Rt 111 Ons (Win03)~~	~~Rt 111 Offs (Win03)~~	Rt 111 Ons (Fall11)	Rt 111 Offs (Fall11)	Ons (Total All Routes)	Offs (Total All Routes)	Municipality	Sidewalk Width (ft)	Existing Shelter	Existing Bench	Existing Bus Stop Length (ft)	Proposed Recommendations
15	5623	Washington Ave @ Opp. Carmel St	660	3	Mid Block	111	~~4~~	~~162~~	26	128	26	128	Chelsea	9	No	No	73	Revised Recomm: Lengthen stop by relocating front sign close to driveway to provide 90-100' between signs = -2 parking spaces. Install pavement markings. Sidewalk will be improved as reconstructed as part of Washington Ave Reconstruction Project.
16	5624	Washington Av,#295 @ Jefferson Av	550	3	Near Side	111	~~8~~	~~163~~	6	167	6	167	Chelsea	9	No	No	60	Relocate rear sign 90-100' from front sign to provide sufficient stop length = -2-3 parking spaces. Addpavement markings. Sidewalk will be improved as reconstructed as part of Washington Ave Reconstruction Project.
17	5625	Washington Av,#326 @ Opp. Reynolds Av	670	3	Mid Block	111, 112	~~16~~	~~66~~	11	112	30	118	Chelsea	9	No	Yes	56	Relocate front sign before crosswalk and install rear sign on post 100' from front sign, in coordination with Washington Ave Reconstruction Project. No parking impact. Add pavement markings.
18	5626	Sagamore Ave @ Washington Ave	650	3	Mid Block	111	~~14~~	~~247~~	23	437	23	437	Chelsea	7	No	No	54	Add trash receptacle and pavement markings.
19	5627	Sagamore Ave @ Murray St	750	4	Far Side	111	~~4~~	~~109~~	5	126	5	126	Chelsea	7	No	No	66	Retain stop but relocate to farside of residential driveway and locate signs to provide100-110' stop length = -3 parking spaces. Add pavement markings.
20	5628	Sagamore Ave @ Garfield Av	400	2	Near Side	111	~~8~~	~~123~~	6	137	6	137	Chelsea	7	No	No	53	Relocate rear sign nearside of driveway to provide 90-100' stop length. No parking impact. Add trash receptacle and pavement markings.
21	5629	Garfield Av,#79 @ Clyde St	620	3	Far Side	111	~~3~~	~~64~~	1	69	1	69	Chelsea	8	No	No	47	Remove stop to improve stop spacing and relatively low ridership. Reinstate 1-2 parking spaces at existing stop. Revised stop spacing would be ~930' to relocated stop farside of Exeter.
22	5630	Garfield Av,#137 @ Exeter St	500	2	Mid Block	111	4	~~165~~	2	159	2	159	Chelsea	8	No	No	50	Relocate stop farside of Exeter. Install rear sign at corner and install front sign 60' forward. Reinstate 2 parking spaces at existing stop.
23	5631	Garfield Av,#165 @ Fenno St	800	4	Near Side	111	~~2~~	~~64~~	3	80	3	80	Chelsea	7	No	No	39	Retain signs and bus can use length of driveway at front to pull out. Add pavement markings.
24	5632	Washington Ave @ Columbus St	380	2	Near Side	111	~~7~~	~~51~~	2	179	2	179	Chelsea	7	No	No	59	Remove stop to improve stop spacing, and due to low ridership and location on curve. Reinstate 2-3 parking spaces at existing stop.
25	5633	Washington Ave @ Prospect Ave	820	4	Near Side	111	~~0~~	~~29~~	4	58	4	58	Chelsea	9	No	No	62	Relocate farside of Hy-Sil, installing front and rear signs to provide 60-65' of stop length = -3 parking spaces. Reinstate 3 parking spaces at existing stop. Add pavement markings.
26	5634	Washington Ave @ Arnold St	500	2	Near Side	111	~~0~~	~~25~~	1	37	1	37	Revere	6	No	No	50	Relocate stop midblock between Arnold and Park due to narrowness and poor condition of sidewalk. Install front sign north of second driveway. Investigate constructing concrete landing area within existing asphalt sidewalk (City plans to resurface?). Install rear sign farside of first driveway, provide 90' stop length.
27	15787	Elm St @ Washington Ave, Op Loop	1130	5	Mid Block	110, 111	~~101~~	~~4~~	0	251	26	263	Everett	8	No	No	No	Install rear sign farside of crosswalk and relocate front sign closer to driveway. Add bench, trash receptacle and pavement markings.
							~~4492~~	~~4277~~	5147.98 15%	4883.46 14%								

For explanation of terms, please see Glossary and Abbreviations handout.

See map "Chelsea" for continuation of route

Massachusetts Bay Transportation Authority

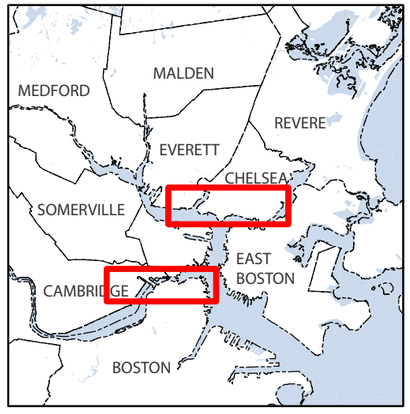
massDOT

Key Bus Route Improvement Program

Route 111

Proposed Recommendations Boston-Chelsea

- Route 111
- Other Bus Routes
- 8310 Existing Stops w/ Bus Stop Identification No.
- Proposed Stops
- Proposed Eliminated Stops
- Rapid Transit Lines w/ Stations
- Commuter Rail w/ Stations
- 750 ft Distance between Existing Stops
- Municipal Boundaries



MAP SOURCE: MassGIS

0 500 1,000 2,000 Feet

McMAHON TRANSPORTATION ENGINEERS & PLANNERS

7 December 2011

Massachusetts Bay Transportation Authority

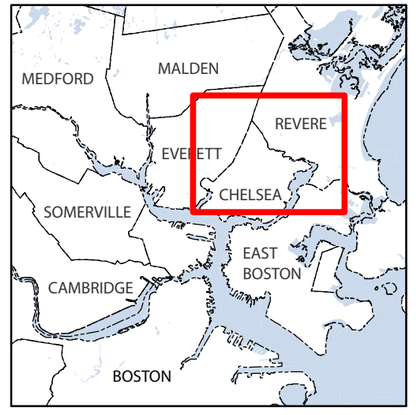
massDOT

Key Bus Route Improvement Program

Route 111

Proposed Recommendations Chelsea

- Route 111
- Other Bus Routes
- 5740 Existing Stops w/ Bus Stop Identification No.
- Proposed Stops
- Proposed Eliminated Stops
- Rapid Transit Lines w/ Stations
- Commuter Rail w/ Stations
- 750 ft Distance between Existing Stops
- Municipal Boundaries



MAP SOURCE: MassGIS

0 500 1,000 2,000 Feet

McMAHON TRANSPORTATION ENGINEERS & PLANNERS

7 December 2011

See map "Boston-Chelsea" for continuation of route